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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,422	05/10/2001	Clive Eric Holborow	D2492	6769
22653	7590	06/27/2005	EXAMINER	
EDWARD W CALLAN NO. 705 PMB 452 3830 VALLEY CENTRE DRIVE SAN DIEGO, CA 92130			MOORE JR, MICHAEL J	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/853,422		HOLBOROW, CLIVE ERIC	
	Examiner		Art Unit	
	Michael J. Moore, Jr.		2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10,14 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10,14 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Replacement drawings were received on 1/28/2005. These drawings are acceptable and have been entered.

Specification

2. The amendment filed 1/28/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: In Applicant's amended paragraph on page 2, line 12 – line 22 of the specification, the addition of "a discrete information packet of a group of information packets being transmitted to the second terminal" as well as "an associated refresh field that is received as part of the discrete information packet" constitutes new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

3. Claims 8, 14, and 19 are objected to because of the following informalities:

Regarding claim 8, an objection is made to the use of the phrase "adapted to" on lines 3 and 7. The use of this phrase constitutes optional language that does not limit the scope of this claim (See MPEP 2106, II, C). A suggestion would be to replace this phrase with "configured to". Also, on line 2, a "colon" is needed after the word "comprising".

Regarding claim **14**, an objection is made to the use of the phrase "adapted to" on line 3. The use of this phrase constitutes optional language that does not limit the scope of this claim (See MPEP 2106, II, C). A suggestion would be to replace this phrase with "configured to". Also, on line 2, a "colon" is needed after the word "comprising".

Regarding claim **19**, an objection is made to the use of the phrase "adapted to" on line 3. The use of this phrase constitutes optional language that does not limit the scope of this claim (See MPEP 2106, II, C). A suggestion would be to replace this phrase with "configured to". Also, on line 2, a "colon" is needed after the word "comprising". Lastly, on line 4, the word "a" is missing before the word "payload".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims **7-10, 14, and 19-21** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The addition of the limitations "a discrete information packet of a group of information packets being transmitted to the second terminal" and "an associated

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refresh field that is received as part of the discrete information packet” made accordingly to claims **7-10, 14, and 19-21** by Applicant constitutes new matter that was not present in the originally filed application.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims **7-10, 14, and 19-21** are rejected under 35 U.S.C. 102(e) as being anticipated by Bunn et al. (U.S. 2002/0073227) (“Bunn”). Bunn teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **8**, “A system for compressing and decompressing information packets transmitted from a first terminal to a second terminal” is anticipated by the system shown in Figure 1 containing CMTS 102 and cable modems 106 and 108. “Suppression means in the first terminal adapted to use a predetermined suppression algorithm for removing at least one field that varies in a known pattern from a payload header of a discrete information packet of a group of information packets being transmitted to the second terminal” is anticipated by the cable modem (suppression means) shown in Figure 3 as well as the suppression of changing header fields spoken of on page 9, paragraph 140, lines 2-8.

"Restoration means in the second terminal adapted to use a predetermined restoration algorithm for restoring the removed at least one field that varies in the known pattern to the payload header of a said discrete information packet received from the first terminal" is anticipated by the CMTS (restoration means) shown in Figure 2 as well as the header reconstruction spoken of on page 14, paragraphs 229-231 and shown in Figure 16B.

Lastly, "from time to time restoring the at least one removed field that varies in the known pattern by using an associated refresh field that is received as part of the discrete information packet" is anticipated by the header reconstruction spoken of on page 14, paragraphs 229-231 and shown in Figures 16B where delta-encoded values of Figure 18 (associated refresh field) are used to restore a header.

Regarding claim 7, "wherein the suppression means provides the group of information packets that are being transmitted to the second terminal as constant-length compressed information packets" is anticipated by the TCP protocol packets 1410 retrieved as spoken of on page 14, paragraphs 225-231.

Regarding claim 9, "providing a refresh control field identifying a refresh field that is to be transmitted with the discrete information packet" is anticipated by change field 1700 (refresh control field) of Figure 18 that corresponds to delta-encoded value field 1808 (refresh field) as spoken of on page 14, paragraph 229. "Providing the refresh field identified by the refresh control field for transmission to the second terminal with the discrete information packet" is anticipated by delta-encoded value field 1808 (refresh field) shown in Figure 18 used to restore a header as spoken of on page 14,

paragraphs 229-231. Lastly, “providing a control field that includes the refresh control field for transmission to the second terminal with the discrete information packet” is anticipated by change field 1700 (control field, refresh control field) of Figure 18.

Regarding claim **10**, “in accordance with the refresh control field received with the discrete information packet, identifying the associated refresh field received with the discrete information packet” is anticipated by delta-encoded value field 1808 (refresh field) shown in Figure 18 used to restore a header as spoken of on page 14, paragraphs 229-231.

Regarding claim **14**, “An apparatus for compressing information packets for transmission to a remote terminal” is anticipated by the system shown in Figure 1 containing CMTS 102 and cable modems 106 and 108. “Suppression means adapted to use a predetermined suppression algorithm for removing at least one field that varies in a known pattern from a payload header of a discrete information packet of a group of information packets being transmitted to the remote terminal” is anticipated by the cable modem (suppression means) shown in Figure 3 as well as the suppression of changing header fields spoken of on page 9, paragraph 140, lines 2-8.

“Providing a refresh control field identifying a refresh field that is to be transmitted with the discrete information packet” is anticipated by change field 1700 (refresh control field) of Figure 18 that corresponds to delta-encoded value field 1808 (refresh field) as spoken of on page 14, paragraph 229. “Providing the refresh field identified by the refresh control field for transmission to the second terminal with the discrete information packet” is anticipated by delta-encoded value field 1808 (refresh field) shown in Figure

18 used to restore a header as spoken of on page 14, paragraphs 229-231. Lastly, "providing a control field that includes the refresh control field for transmission to the second terminal with the discrete information packet" is anticipated by change field 1700 (control field, refresh control field) of Figure 18.

Regarding claim **19**, "An apparatus for decompressing transmitted information packets received from a remote terminal" is anticipated by the system shown in Figure 1 containing CMTS 102 and cable modems 106 and 108. "Restoration means adapted to use a predetermined restoration algorithm for restoring a removed at least one field that varies in a known pattern to a payload header of a discrete information packet received from the remote terminal" is anticipated by the CMTS (restoration means) shown in Figure 2 as well as the header reconstruction spoken of on page 14, paragraphs 229-231 and shown in Figure 16B. Lastly, "from time to time restoring the at least one removed field that varies in the known pattern by using an associated refresh field that is received as part of the discrete information packet" is anticipated by the header reconstruction spoken of on page 14, paragraphs 229-231 and shown in Figures 16B where delta-encoded values of Figure 18 (associated refresh field) are used to restore a header.

Regarding claim **20**, "in accordance with the refresh control field received with the discrete information packet, identifying the associated refresh field received with the discrete information packet" is anticipated by delta-encoded value field 1808 (refresh field) shown in Figure 18 used to restore a header as spoken of on page 14, paragraphs 229-231.

Regarding claim **21**, "wherein the suppression means provides the group of information packets that are being transmitted to the second terminal as constant-length compressed information packets" is anticipated by the TCP protocol packets 1410 retrieved as spoken of on page 14, paragraphs 225-231.

Response to Arguments

8. Applicant's arguments with respect to claims **7-10, 14, and 19-21** have been considered but are moot in view of the new ground(s) of rejection provided above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Le (U.S. 6,300,887) and Chapman (U.S. 6,438,123) are also references pertinent to this application.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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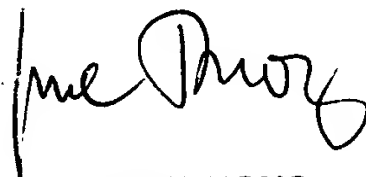
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mjm MM


FRANK DUONG
PRIMARY EXAMINER

Michael J. Moore, Jr.
Examiner
Art Unit 2666